

# Work Order ID 72069

Friday, July 22, 2011 9:46:24 AM



MAT BLACK SHIP Aug 10/11

Page 1

Item ID: D2573

Accept



Setup Start



Revision ID:

Item Name: Saddle, Aft Out 205

Stop



Start Date: 7/19/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 7/29/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan: MF

Date: 11-07-22

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D2573

Rev E

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Program Batch No. 72069 Double check by: D-n ☐ 1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets ☐ 3-Machine Step No 3 per Folio FA051 and insp

110

0.00



CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

0.00

Conventional Milling Machine

Machine keyway as per dwg D2573 & D2574

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

# Work Order ID 72069

Friday, July 22, 2011 9:46:25 AM



Page 2

Item ID: D2573

Accept



Setup Start



Revision ID:

Item Name: Saddle, Aft Out 205

Stop



Start Date: 7/19/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 7/29/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

B.A N/08/09

2 0

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

2x 0 M-14/08/09

150

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME: 1:00pm ☐ OVEN TEMPERATURE:  
1:30pm ☐ FINISH TIME: 3:26pm

2 0 M-15/08/09

**Work Order ID 72069**

Friday, July 22, 2011 9:46:25 AM



Page 3

Item ID: D2573

Accept



Setup Start



Revision ID:

Stop



Item Name: Saddle, Aft Out 205

Start Date: 7/19/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 7/29/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

2x ~~Ø~~ M-11/08/09

170

Identify as per dwg &amp; Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

0.00

Packaging

11/5/9 SK20

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

CK 11/08/10

11-08-10 (2)

# Picklist Print

Tuesday, July 19, 2011 9:03:55 AM

Page 1

Work Order ID: 72069

Parent Item: D2573

Parent Item Name: Saddle, Aft Out 205

Start Date: 7/19/2011

Required Date: 7/29/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP: 1 As Per RevE 06-01-27 JLM

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

D6101-007

Manufactured No

100

Each

23.0000

1

2



Saddle Billet

Location

Loc Qty

Loc Code

MAT045

23

65383

1

65954

4

70680

18

B71722X 2

enr 11/08/05

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

|  |                           |
|--|---------------------------|
| <b>DART AEROSPACE LTD</b>                | <b>Work Order:</b> 72069  |
| <b>Description:</b> Saddle, Aft Outboard | <b>Part Number:</b> D2573 |
| <b>Inspection Dwg:</b> D2573 Rev. E      | <b>Page 1 of 1</b>        |

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

|               |       |       |                | Recorded Actual Dimensions |       |   |   | By | Date |
|---------------|-------|-------|----------------|----------------------------|-------|---|---|----|------|
| Dim           | Min   | Max   | Go/No Go Gauge | 1                          | 2     | 3 | 4 |    |      |
| A             | 0.438 | 0.443 |                | .440                       | .440  |   |   |    |      |
| B             | 1.745 | 1.755 |                | 1.750                      | 1.748 |   |   |    |      |
| C             | 3.495 | 3.505 |                | 3.500                      | 3.501 |   |   |    |      |
| D             | 1.745 | 1.755 |                | 1.750                      | 1.748 |   |   |    |      |
| E             | 7.990 | 8.010 |                | 8.005                      | 8.008 |   |   |    |      |
| F             | 0.490 | 0.510 |                | .501                       | .501  |   |   |    |      |
| G             | 0.257 | 0.262 |                | .258                       | .258  |   |   |    |      |
| H             | 0.375 | 0.380 |                | .376                       | .376  |   |   |    |      |
| I             | 0.490 | 0.510 |                | .503                       | .503  |   |   |    |      |
| J             | 1.174 | 1.184 |                | 1.177                      | 1.177 |   |   |    |      |
| K             | 0.558 | 0.578 |                | .570                       | .570  |   |   |    |      |
| L             | 1.174 | 1.184 |                | 1.177                      | 1.177 |   |   |    |      |
| M             | 1.365 | 1.375 |                | 1.369                      | 1.369 |   |   |    |      |
| N             | 2.495 | 2.505 |                | 2.499                      | 2.499 |   |   |    |      |
| O             | 4.119 | 4.129 |                | 4.123                      | 4.123 |   |   |    |      |
| P             | 0.115 | 0.135 |                | .126                       | .126  |   |   |    |      |
| Q             | 0.115 | 0.135 |                | .125                       | .126  |   |   |    |      |
| R             | 0.240 | 0.260 |                | .252                       | .252  |   |   |    |      |
| S             | 0.115 | 0.135 |                | .126                       | .126  |   |   |    |      |
| T             | 0.178 | 0.198 |                | .188                       | .188  |   |   |    |      |
| U             | 3.210 | 3.250 |                | 3.230                      | 3.230 |   |   |    |      |
| V             | 0.230 | 0.250 |                | .241                       | .241  |   |   |    |      |
| W             | 0.115 | 0.135 |                | .126                       | .127  |   |   |    |      |
| X             | 0.308 | 0.313 |                | .312                       | .313  |   |   |    |      |
| Y             | 0.760 | 0.765 |                | .760                       | .760  |   |   |    |      |
| Z             | 0.352 | 0.372 |                | .362                       | .362  |   |   |    |      |
| AA            | 0.470 | 0.530 |                | .500                       | .500  |   |   |    |      |
| AB            | 0.615 | 0.635 |                | .627                       | .625  |   |   |    |      |
| AC            | 0.053 | 0.073 |                | .063                       | .063  |   |   |    |      |
| AD            | 0.240 | 0.260 |                | .252                       | .250  |   |   |    |      |
| AE            | 1.500 | 1.520 |                | 1.512                      | 1.512 |   |   |    |      |
| AF            | 0.115 | 0.135 |                | .125                       | .125  |   |   |    |      |
| AG            | 0.240 | 0.280 |                | .250                       | .250  |   |   |    |      |
| AH            | 0.240 | 0.260 |                | .250                       | .250  |   |   |    |      |
| AI            | 2.000 | 2.020 |                | 2.002                      | 2.003 |   |   |    |      |
| AJ            | 0.023 | 0.043 |                | .033                       | .033  |   |   |    |      |
| Accept/Reject |       |       |                |                            |       |   |   |    |      |

|                   |          |
|-------------------|----------|
| Measured by: F.K. | 11/08/08 |
| Date:             | 11/08/08 |

|                  |          |
|------------------|----------|
| Audited by: B.A. |          |
| Date:            | 11/08/09 |

| Rev | Date     | Change                                  | Revised by | Approved |
|-----|----------|---|------------|----------|
| A   |          | New Issue                               | RF         |          |
| B   | 02.09.26 | Re-format; Added Rev. D                 | KJ         |          |
| C   | 02.10.11 | Re-format; Added DT8682, DT8683, DT8684 | KJ         |          |
| D   | 05.05.05 | Added dimension AI                      | KJ/RF      |          |
| E   | 05.12.05 | Added dimension AJ                      | KJ/JLM     |          |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

SUBJECT TO AMENDMENT

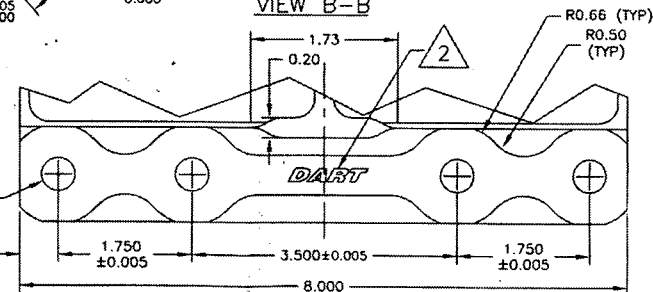
NO. 22069

PL 11-07-19

05.12.06

MATERIAL: 7075-T7351 (QQ-A-250/12)  
(REF DART SPEC. D6102-001)  
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
DART QSI 005 4.3  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125
- 3 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.063" x 45° ALL AROUND
- 5 CHAMFER 0.033" x 45° (SEE DETAIL C)



|   |          |   |
|---|----------|---|
| E | 05.07.13 | ADD CHAMFER ON RIDGE NOTE 5                               |
| D | 02.09.06 | ADD RIDGES; TIGHTEN TOLERANCES                            |
| C | 99.10.22 | INCRP. DEO 9123/9079/9102<br>ADD DIMENSIONS PER TSR A1177 |
| B | 96.12.02 | ADD GRAIN DIR., 0.438 WAS 0.425                           |
| A | 96.09.16 | NEW ISSUE   |

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DART AEROSPACE LTD.

|   |  |   |            |
|---|--|---|------------|
| DESIGN  | DRAWN BY   |  <b>DART AEROSPACE LTD.</b><br>HARRISBURY, ONTARIO, CANADA |            |
| DS  | PH   |   |            |
| CHECKED  | APPROVED  | DRAWING NO.   | REV. E     |
|   |  | D2573   | SHEET 1 OF |
| DATE  | TITLE  |   | SCALE      |
| 05.07.13  | OUTER AFT SADDLE   |   | 2:         |

2:2



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries